

REMARKS

The Office Action of May 18, 2006 has been received and carefully reviewed. Applicant notes with appreciation the indication in the Office Action that claims 19-22 are allowed. The Office Action sets forth a new ground of rejection of claims 1-18 in view of the Applicants' Appeal Brief of February 9, 2006, in which a new reference Scherzer U.S. 2002/0193104 is cited. Applicants submit that Scherzer and the other references in the proposed new combination applied in the latest Office Action fail to teach all the elements of rejected claims 1-18 as discussed further in the remarks below, whereby reconsideration of rejected claims 1-18 and allowance of pending claims 1-22 is respectfully requested in view of the following remarks.

I. REJECTION OF CLAIMS 1-18 UNDER 35 U.S.C. § 103

The Office Action rejected claims 1-18 as being obvious under 35 U.S.C. § 103 in view of Haymes 6,751,443 in view of Oh 6,714,789 and further in view of Scherzer U.S. 2002/0193104. This proposed new combination, however, fails to teach or suggest all the features of claims 1-18, and for at least this reason, reconsideration and withdrawal of these claim rejections is respectfully requested. In particular, independent claim 1 recites a data collection method for identifying wireless network RF dead zones, including among other acts or events, receiving position data at a base station from a powered up mobile station, where the position data is sent by the mobile station in response to the mobile station determining that a received pilot strength measurement message is less than a predetermined threshold. Independent claim 12 includes position data being sent by the powered up mobile station when the mobile determines that a received pilot strength measurement message is less than a predetermined threshold.

As acknowledged on pages 4 and 9 of the Office Action, ***the combination of Haymes and Oh does not disclose position data being sent by a mobile in response to or when the mobile determines that a received pilot strength measurement message is less than a predetermined threshold.*** Applicants agree and refer to the related comments in prior responses and the Applicants' appeal brief.

The Office Action at pages 5 and 9 asserts that Scherzer discloses the position data being sent by the powered up mobile station when the mobile station determines that a received pilot strength measurement message is less than a predetermined threshold, citing to Scherzer page 3, paragraph [0035], and states that it would have been obvious to provide this feature of Scherzer to the combination of Haymes and Oh

"in order to detect the signal to make a system reliability". **Applicants have found no teaching or suggestion of this element in the cited paragraph [0035] or elsewhere in Scherzer.** Thus, neither Haymes, Oh, nor Scherzer teach or fairly suggest a mobile sending position data in response to or when the mobile determines the received pilot strength measurement message is less than a predetermined threshold. Consequently, **the proposed combination of Haymes with Oh and Scherzer fails to teach all the elements of claims 1-18** and thus no *prima facie* obviousness has been shown. Applicants therefore request reconsideration of claims 1-18 as these claims are not rendered obvious by the proposed combination.

The Scherzer reference appears directed to providing sculpted or shaped antenna beams in communication networks using passive antenna feed networks adapted for corresponding topological and morphological features. With respect to Applicants claims 1-18, however, Scherzer appears to say nothing about mobiles sending position information to a base station at all, much less at the timing set forth in the claims. The cited paragraph [0035] of Scherzer is reproduced below:

[0035] It can readily be seen from FIG. 1 that there are outage areas (locations where service is not supported) within the cells. For example, due to the effects of signal shadowing, sector 121 does not fully cover a corresponding portion of cell 102. Moreover, areas of outage are typically defined with reference to noise energy and, therefore, are more extensive than initially apparent from FIG. 1. For example, in some cellular systems in common use today outage areas are determined as any area in which a particular pilot E/N_0 (energy per chip of the pilot to the total received spectral density) is less than a predetermined threshold, such as -15 dB. Accordingly, areas having high noise characteristics, such as the areas where sectors 112 and 121 overlap and where sectors 112 and 131 overlap, in addition to areas where a particular signal of interest receive strength is relatively low, may experience outage conditions. Moreover, both the user's signal of interest, such as a serving pilot signal, and interference associated therewith are typically subject to log-normal shadowing. Accordingly, the communication conditions experienced are dependent on the variance of both.

Applicants in this regard note that the above paragraph [0035] and other sections of Scherzer indeed mention a threshold (e.g., paragraph [0005]). However, paragraph [0035] of Scherzer does not even mention a mobile station sending position information to a base station, and clearly does not teach sending of such in the conditions recited in Applicants' claims, i.e., in response to or when the mobile determines the received pilot

strength measurement message is less than a predetermined threshold. Moreover, Applicants have studied the remainder of Scherzer and found no such teaching or suggestion elsewhere in Scherzer. In this regard, paragraph [0040] of Scherzer does mention various techniques for gathering path loss angular profile information, but these examples do not indicate a mobile sending position information to a base station when a pilot strength measurement message is below a threshold.

Thus, while the Office Action alleges that Scherzer teaches position data sent by a mobile in response to the mobile determining that the received pilot strength measurement message is below a threshold, the cited paragraph [0035] of Scherzer and the rest of the Scherzer reference appear silent with respect to this claim element. To the extent that some other portion of Scherzer is believed to teach this element of the claims, the Examiner is requested to provide an indication any such specific portions of the Scherzer reference in the next action. Absent such, however, Scherzer does not appear to remedy the deficiencies of the initial combination of Haymes with Oh, wherein ***the proposed combination of Haymes with Oh and Scherzer fails to teach or suggest all the elements of independent claims 1 and 12.*** As a result, no prima facie case of obviousness has been set forth and Applicants request reconsideration and withdrawal of the rejection of claims 1-18 under 35 U.S.C. § 103.

CONCLUSION

For at least the above reasons, the currently pending claims 1-22 are believed to be in condition for allowance and notice thereof is requested.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 06-0308, LUTZ200216.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

June 10, 2006
Date

/Eric Highman/
Eric Highman
Reg. No. 43,672
1100 Superior Avenue
Seventh Floor
Cleveland, Ohio 44114-2579
216-861-5582